

59 Johnson Rd
Windham, ME 04062

April 19, 2017

SPRPCE Innovation School
Bangor, ME

Dear Hiring Committee,

I am applying for the 7th and 8th Grade Math/Science Alternative Education position posted on ServingSchools.com. I will graduate from the University of Maine at Farmington in May with a double major in Mathematics and Secondary Education with a concentration in math as well as a minor in Chemistry. After completing student teaching and the Middle Level Praxis II I will be eligible for my dual Maine State Teaching Certificate, grades 5-12. I was drawn to the math and science component of this posting as well as the alternative and innovative nature of the school.

As a new teacher I bring a collaborative, integrative, and technological approach to the classroom. My resume will illustrate my work teaching various subjects and skills with audiences of all ages and ability levels. I enjoy getting to work closely with my students and building strong relationships as a foundation for learning. My love for math and science have been symbiotic and I believe that they should be heavily integrated, just as they are in life. As a student I was able to grow up with great technology in my classrooms and have continued to explore how we can best use technology in our classroom. Growing up with one-to-one technology from 6th grade and on has given me a firm grip on the many advantages and pitfalls of technology. I believe strongly in the middle school student's ability to create products and projects beyond our own hopes and imaginations and I work hard to bring that out of my students through collaboration, integration, and exploration.

Please explore the rest of my application packet to understand what a great fit I am for the position of Math/Science Alternative Educator. To contact me for an interview call 207-615-1769 or email marissa.lagassey@maine.edu.

Best wishes,

Marissa LaGassey

Bangor School Department

73 Harlow St, Bangor, ME, 04401

207-992-4152

Date: April 25, 2017

APPLICATION FOR TEACHING POSITION

MT. BLUE REGIONAL SCHOOL DISTRICT DOES NOT DISCRIMINATE IN THE OPERATION OF ITS EDUCATIONAL EMPLOYMENT POLICIES AND WILL HONOR ALL APPROPRIATE LAWS RELATIVE TO DISCRIMINATION.

Name: Marissa LaGassey

(Grade level/subject/other)
Mathematics, Grades 5-12

When will you be available? Summer 2017

Permanent Address 59 Johnson Rd Windham, ME 04062

Phone: (207)615-1769

Temporary Address _____

Phone: _____

EDUCATION: Transcripts of all college/university grades must be provided. It is essential that this section be completed accurately.

Degree(s) held Secondary Ed Major Mathematics Major Chemistry Minor
Number of semester hours in:

<u>4</u>	Reading	<u>Secondary Education (22)</u>	Major (Subject: <u>Mathematics</u>)
<u>52</u>	Math	<u>Mathematics (52)</u>	Major
<u>8</u>	Special Education	<u>Chemistry (20)</u>	Minor

Undergraduate grade point average 3.79

Graduate grade point average N/A

CERTIFICATE: You will need to provide copies of certification. **Have you been fingerprinted by the Maine Department of Education?** Yes ☒ No ☐ If you checked **Yes**, you must provide a copy to Personnel. If you checked **No**, you must get fingerprinted within 20 days after your start date, unless you are currently Maine certified in the position in which you are hired for.

NOTE: EMPLOYMENT CANNOT BE FINALIZED UNTIL THE APPLICANT HAS COMPLETED REQUIREMENTS FOR COMPLETE BACKGROUND CHECKS AND FINGERPRINTING AS REQUIRED BY MAINE STATE STATUTE.

If you do not hold a Maine certificate, for what type of Maine certificate are you applying and eligible? _____
If you do not hold a Maine certificate, you will also need to be fingerprinted.

NOTE: Candidates who do not hold Maine certification should direct an inquiry to the Maine Department of Education, Division of Certificate/Placement, Augusta, Maine 04333.

EXPERIENCE: A resume must be provided. In addition to educational background and work experiences, include extra-curricular activities in which you have been involved. Please list below position held, employer and dates of employment for the past ten years.

<u>From (month/year)</u>	<u>To (month/year)</u>	<u>Position</u>	<u>Employer</u>
<u>January 2016</u>	<u>May 2017</u>	<u>SI Leader</u>	<u>UMF Learning Commons</u>
<u>May 2014</u>	<u>Present</u>	<u>Therapeutic Riding Instructor</u>	<u>Riding to the Top</u>
<u>May 2014</u>	<u>Present</u>	<u>Nanny</u>	<u>Private Family</u>

Number of year(s) of teaching experience 0. On a separate sheet, please describe a specific class or class activity you planned and actually conducted which illustrates your philosophy of teaching and is the best example of your teaching skills. What evidence showed you that this class or activity was successful in terms of student motivation and achievement?

Are you able to perform the tasks of the job for which you are applying without accommodations? Yes ☒ No ____ If an accommodation would be required to enable you to perform the job tasks, please describe that accommodation and how it would enable you to perform the job tasks.

Have you ever been disciplined, discharged, or asked to resign from a prior position? Yes ____ No ☒ If yes, explain circumstances on a separate sheet and attach to the application.

Have you ever resigned from a prior position after a complaint had been received against you or your conduct was under investigation or review? Yes ____ No ☒

Has your contract in a prior position ever been non-renewed? Yes ____ No ☒

Have you ever not been nominated for re-employment in a prior position or ever had your nomination for re-employment not been approved? Yes ____ No ☒

Have you ever been charged with or investigated for sexual abuse or harassment of another person? Yes ____ No ☒

Have you ever been convicted of a crime (Other than a minor traffic offense)? Yes ____ No ☒

Have you ever entered a plea of guilty or "no contest" (nolo contendere) to any crime (other than a minor traffic offense)? Yes ____ No ☒

Have you ever had a professional license or certificate suspended or revoked in any state, or have you ever voluntarily surrendered, temporarily or permanently, a professional license or certificate in any state? Yes ____ No ☒

Has any court ever deferred, filed or dismissed proceedings without a finding of guilt and required that you pay a fine, penalty or court costs and/or imposed a requirement as to your behavior or conduct for a period of time in connection with any crime (other than a minor traffic offense)? Yes ____ No ☒

If you have answered yes to any of the previous questions, provide full details on an additional sheet including, with respect to court actions, the date, offense in question, and the address of the court involved. Conviction or other disposition of a crime is not necessarily an automatic bar to employment.

REFERENCES: List three, two of who are most recent supervisors, who can comment on your ability and whom we may contact. In addition, please provide three letters of reference from persons who are not related to you (may be from references listed below).

Deborah Baker	deborah.baker@maine.edu
William (Pete) St. John	william.st@maine.edu
Grace Ward	gward@maine.edu

My signature below constitutes authorization to check my employment history, including without limitation, criminal arrest and conviction record checks, reference checks, and release of investigatory information possessed by any state, local or federal agency. I further authorize those persons, agencies or entities that the Mt. Blue RSD contacts in connection with my employment application to fully provide the Mt. Blue RSD any information on the matters set forth above. I expressly waive in connection with any request for or provision of such information, any claims, including without limitation, defamation, emotional distress, invasion of privacy, or interference with contractual relations that I might otherwise have against the Mt. Blue RSD, its agents and officials or against any provider of such information.

I understand that information submitted in and with this application may be disclosed to a screening and/or interviewing committee, which may include board members, administrators, other staff, and members of the community. I give my consent to this disclosure.


(Signature)

4/30/17
(Date)

NOTE: ALL APPLICATION MATERIALS BECOME THE PROPERTY OF THE MAINE STATE MT. BLUE RSD. NONE WILL BE RETURNED. PROVIDING ANY FALSE OR MISLEADING INFORMATION ON THIS APPLICATION OR IN THE APPLICATION OR EMPLOYMENT SCREENING PROCESS SHALL BE FULLY SUFFICIENT GROUNDS TO REFUSE TO EMPLOY THE APPLICANT OR, IF THE APPLICANT HAS BEEN EMPLOYED, TO IMMEDIATELY DISMISS THE APPLICANT/EMPLOYEE.

FOR OFFICE USE ONLY

____ Application form completed	____ Copies of Transcripts	____ Copy(s) of Maine Certification	____ Resume
____ Letters of Reference (3)	____ State Fingerprinting		

revised 9/04

On a separate sheet, please describe a specific class or class activity you planned and actually conducted which illustrates your philosophy of teaching and is the best example of your teaching skills. What evidence showed you that this class or activity was successful in terms of student motivation and achievement?

Ants and the Aardvark Fall 2015

This lesson was taught cooperatively with two colleagues to a group of about 20 7th graders who came to our Math Methods class. We started this lesson off with an activity called the Ants and the Aardvark. There was a large probability tree on the floor and each student went through as an 'ant' with a coin toss determining their path at every intersection. Students made a prediction at the beginning about where the aardvark should sit to get the most ants. As the students went through we recorded the data on Tinkerplots, creating a live action graph of the results.

After students got a general idea for the data and the pattern that resulted from this probability tree, they used their own laptops to simulate many trials through the 'ant maze'. Tinkerplots allows students to collect large quantities of data quickly and simulate any probability event. Students were able to run the simulations and send the data directly to a graph. Students were then answered the question, 'where should the aardvark sit' with certainty, and assign probabilities to each path and exit hole. Tinkerplots also allows students to manipulate the probability tree, changing probabilities or closing off paths, and see how those changes impacted the ants and the aardvark.

This lesson was very successful in that it got students using a relatively complex technology seamlessly. They could collect large quantities of data, and even get creative with the probability tree with only a very low threshold. The best part of this technology and our use of it was how easy it was for students to get started in the program and how far they could take it. This type of 'low threshold, high ceiling' program is the type of technology I strive to incorporate into my teaching. If a technology can't take students beyond where they already were, what is its use? Tinkerplots is student friendly and allows teachers to facilitate learning opportunities and provide excellent visuals for students.

Although ants and aardvarks aren't exactly 'real life' for most seventh graders this lesson was fun, got students moving, and helped ease students in to the daunting topic of probability distribution and even Pascal's triangle. Students were able to see their predictions played out in the Tinkerplots simulations and eventually understand the math that makes it work. This lesson incorporated excellent technology, whole class and partner cooperation, and a unique method of instruction. Students easily saw a probability distribution and Pascal's triangle with little to no lecturing or jargon. Lessons like this, where students use their resources to make predictions and discoveries on their own, are the type of learning experiences I work hard to cultivate.



UNIVERSITY OF MAINE AT FARMINGTON
COLLEGE OF EDUCATION, HEALTH AND REHABILITATION

LESSON PLAN FORMAT
EDU 361 Secondary/Middle Math Methods

Teacher's Name: Ms. Yorke, Ms. LaGassey, and Mr. Camire

Grade Level: Middle School

Numbers of Days: 1

Topic: Probability and Statistics

Room Arrangement: Half-circle, students arranged in pairs

PART I

Objectives:

Students will understand that the relative frequency (and probability) of certain events is determined by the number of “paths” to get there or “ways to occur.”

Students will know how to use a simulation model to collect data

Students will be able to collect data to help draw a conclusion about which event is most likely.

Product: TinkerPlots

Common Core State Standards (CCSS) Alignment

Content Area: Statistics and Probability

Grade Level: 7

Domain: Investigate chance processes and develop, use, and evaluate probability models.

Cluster: Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.

Which CCSS Mathematical Practice(s) will be addressed (list the number and the description):

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than

simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Rationale: Students will be using a probability model to simulate ants exiting holes based on what path they take. Students will observe the frequency of the ants and make conclusions about chance processes. Students will have to think beyond the surface of the problem to recognize why the ants exit the middle holes more often than they do the holes on the far left and right. They will also be analyzing patterns and relationships formed through modeling which will allow them to interpret results and draw conclusions.

Assessments

Pre-Assessment: Fist to five; How comfortable are you with probability?

Formative (Assessment for Learning)

Section I – checking for understanding during instruction

Fist to five

Section II – timely feedback for product (self, peer, teacher)

Exit Ticket - Students will receive an exit ticket with a few minutes remaining during the session to give feedback to the instructors about how the lesson went. What was their favorite part of the lesson? Is there anything they can think of to improve?

Summative (Assessment of Learning): (Description of Product)

Students will use the Tinkerplots document, Ants, to simulate a large amount of ants coming to the surface. Based on the data they collect students will determine where the aardvark should wait to get the most ants.

Integration

Technology and SAMR Level

The technology in this lesson is at the redefinition level of SAMR. Tinkerplots allows students to simulate the probability of ants coming out of each hole. This is a simulation that would be complicated to do without the help of Tinkerplots. With the help of Tinkerplots students can run literally hundreds of simulations and the data is automatically collected for them in a table. To do this without Tinkerplots would be extremely difficult if not impossible.

Other Content Areas:

Science-Being able to understand, analyze and interpret data from statistics.

Instructional Model (Select one: direct instruction, inquiry training, concept attainment, learning cycle, concept of formation, unguided inquiry, cooperative learning) *NOTE: Must use different instructional models during the unit.*

Concept Attainment

Rationale: Concept Attainment is an important part of this lesson for the students. Students are to attain information and the material by doing the activities on their own and learning through that way. Students are experimenting and working on problem sets with themselves and a partner, they are able to observe and explore the material through Tinkerplots to help with their understanding.

Groupings

Section I - Graphic Organizer & Cooperative Learning used during instruction

Tinkerplots-This will allow students to use technology to organize the material and help develop and further their understanding of the material. Tinkerplots will help them experiment

with probability first hand, and experiment with different activities to help keep them engaged. Students working together doing this is a great cooperative learning experience because they are working together, listening to different perspectives, and helping each-other develop a better understanding of the material.

Section II – Groups and Roles for Product

Students will work in pairs to answer questions. Students will also work together as a class to collect and create the data set. Students being engaged and taking part of the data set in the class will make them more engaged and focussed on the learning.

Differentiated Instruction

Motivational Strategy (Tell which Posamentier and Krulik motivational strategy will be used and credit them. Describe how you are using it and why.) *NOTE: Use a variety across the unit.*

Multiple Intelligences Strategies *Note: Address at least six. Delete any you do not address.*

Logical: This is a strategy building activity that will allow them to discover information about probabilities.

Verbal: We will discuss as a group strategies allowed for students to speak up in class.

Visual: TinkerPlots will allow them to have visual information in the classroom by looking at and examining the information..

Intrapersonal: Students will be experimenting on their own with Tinkerplots..

Interpersonal: Students will be working in pairs and discussing as a whole group.

Kinesthetic: Students will be moving throughout the lesson by playing the Ant Vs. Aardvark game as well as contributing to the class.

Modifications/Accommodations

From IEP's (Individual Education Plan), 504's, ELLIDEP (English Language Learning Instructional Delivery Education Plan) I will review student's IEP, 504 or ELLIDEP and make appropriate modifications and accommodations.

Plan for students who are missing pre-requisite skill(s):

For this lesson, students need to be able to add, multiply, subtract and divide, as well as be able to recognizes ratios and percents. If students struggle with these aspects, they can seek help from

their partner, or come ask one of the teachers for assistance. If neither the partner nor another group member know what to do, then one of the teachers will be walking around to help. Students necessarily do not need to fully be experts on all of these topics, but must be willing to work hard and see the importance of all these aspects of math and how they can have an impact in their everyday lives.

Plan for accommodating English Language Learners:

Tinkerplots is a great resource to provide visuals which can make the material easier to understand through doing and experimenting on their own rather than listening. They can also work with their partner to use it as a reference to help with understanding.

Plan for accommodating absent students:

Students who are absent, will have the unfortunate experience of not being present at our great lesson.

Extensions (tiering, gifted students, the students who already know it, etc...)

For students who are working through the problems quickly and have a clear understanding they will use the Ants 2 document

Pose this problem to your students:

The ants going through the maze have grown lazy. They don't like to fight gravity and go up, and they would much rather go down. To make their decision, the ants spin a spinner that is divided into two sections, 25% “up” and 75% “down.” Now which two holes should the aardvark stand between to catch the most ants?

The sampler in Ants2.tp models the decisions of the lazy ants. After students have come up with their answers (most will anticipate correctly that the ant-eater should move down), either run this sampler as a class or direct students to open the file and run the simulation until they think they have an answer.

In this case, it is not just the number of ways to get there that determines the relative frequency (probability) at which the ants exit from each hole. It's also determined by the probability of choosing up or down, and those probabilities are now different. For example, u, u, u, u, u is now

much less likely than d, d, d, d, d.

To determine based on the simulation whether it is better to stand between holes 3 and 4, or between 4 and 5, requires a very large sample size. A sample size of 2500 will generally produce more cases between 3 and 4 (the correct answer) than between 4 and 5. Encourage students to keep increasing the sample size until the basic results are consistent from trial to trial—that is, until hole 3 almost always has more outcomes than hole 5, and thus it correctly appears that standing between 3 and 4 is better than standing between 4 and 5.

Materials, Resources and Technology

List all the items you need for the lesson, including handouts.

Pencils, paper, computers, name-tags, tape, coins, worksheets,

Source for Lesson Plan and Research

<https://www.tinkerplots.com/>- TinkerPlots website as well as additional links and videos for reference.

<http://www.sparknotes.com/math/algebra1/probability/terms.html> - Key terms and vocabulary in probability.

PART II:

Teaching and Learning Sequence (2-3 pages)

- Clearly defines the order & structure of the lesson including the appropriate components of the opening, body, and closing based on the selected instructional model (if multiple days, includes the opening, body and closing for each day). Label the instructional model components from Guillaume's *K-12 Classroom Teaching*.
- List the time frames for each component.
- Reference content notes where appropriate (or include them in the Teaching and Learning Sequence so examples are right at your fingertips).

Day 1:

Open-

- Students come and get settled in in their assigned seats. Discuss the goals and objectives for the class. (3 min).
- Pre-assessment: Fist to five; How comfortable are you with [probability](#)?
- Hook: ANT VS. AARDVARK activity. (5-10 min)

Body-

- Discuss the activity. What are some assumptions we can make? Any Patterns? Where should the Aardvark be located to eat most Ants? (2 min)
- Brief tutorial on how to use sampler (2 minutes)
- Students will then be given the ANT VS. AARDVARK worksheet (see handouts) where they will work with a partner and can check in with other groups. The purpose is for them to apply what they just did and help them further enhance their learning and understanding. (15 min)
- Students will open up [TinkerPlots](#). They will have time to experiment with the same activity, except using TinkerPlots to run trials while working on the worksheet (5-10 min)

Close-

- Overview of what we discussed. Talking about the importance of [TinkerPlots](#) and how it helps modify learning. (2 min)
- Exit Ticket (5 min)
- Final thoughts and wrap up. (1-2 min)
- (If Time)-Students can explore and play around with TinkerPlots. (end of lesson)

Content Notes (2-3 pages)

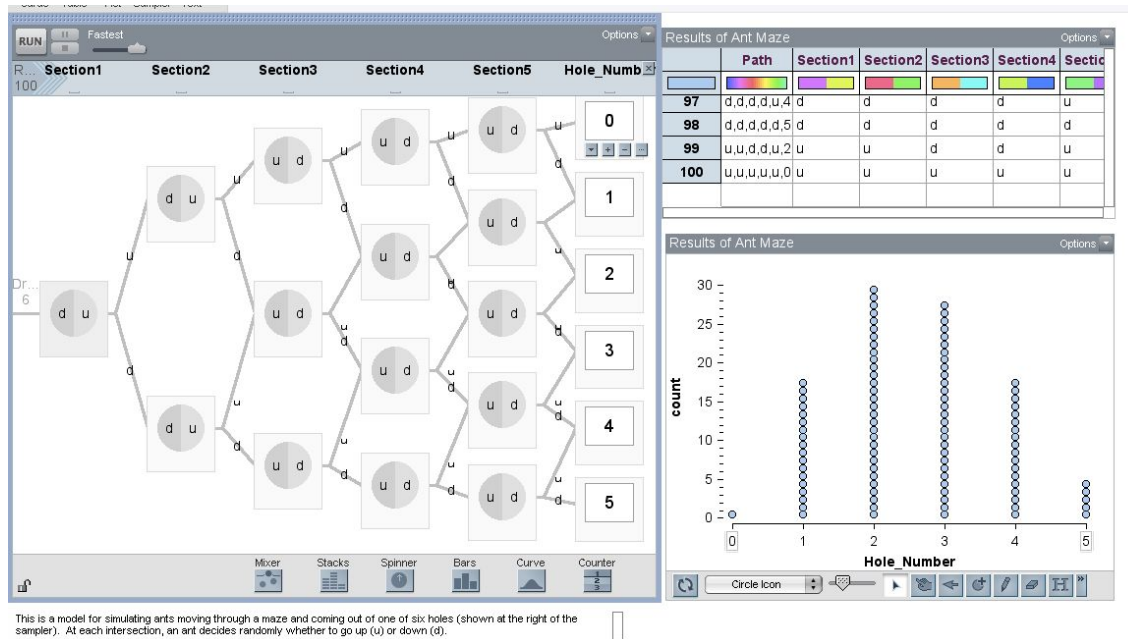
- **Outcomes** - The possible results of an event. For example, when a die is rolled, the possible outcomes are 1 , 2 , 3 , 4 , 5 , and 6 .
- **Probability** - A measure of the likeliness that an event will happen.
- **Frequency** - The number of times the outcome occurs
- **Relative Frequency**- The number of times the outcome occurs relative to the total number of outcomes.
- **Qualitative Data**- Data that can be observed but not measured. Ex: color,

taste, appearance, etc.

- **Quantitative Data-** Deals with numbers in which data can be measured.

Ex: Height, Weight, Temperature, etc

Ant Vs. Aardvark Distribution chart:



Handouts

List the items that need to be printed out for the lesson and attach a camera-ready copy.

Exit Ticket, AARDVARK WORKSHEET

Marissa LaGassey

59 Johnson Rd
Windham, ME 04062

Cell Phone: (207)615-1769

marissa.lagassey@maine.edu

Education

Candidate for B.S. Secondary Education with concentration in Mathematics, B.S. Mathematics,
Minor in Chemistry

University of Maine at Farmington, Farmington, Maine 2014-Present
3.79 GPA, High Honors Dean's List Recipient

Economics and Environmental Science Major

Simmons College, Boston, Massachusetts 2012 - 2014
3.63 GPA, Dean's List Recipient

Teacher Profile

I am an educator who believes in the power of collaboration, integration, and immersion. I hope that I can pass my love for math and the sciences onto the next generation of students through engaging lessons and a learner centered approach. Literacy and writing, technology, science and other content areas will have a strong presence in my classroom as we explore math with context and application. My diverse teaching background gives me a strong understanding of how to facilitate learning and create a safe, cooperative environment.

Teaching Experience

Supplemental Instruction Leader, UMF Learning Commons January 2016-Present
Farmington, Maine

- Lead and plan SI sessions for Statistics (Spring 2016 and Spring 2017) and Calculus I (Fall 2016)
- Collaborate with professors and Learning Commons staff to ensure student success

Therapeutic Riding Instructor, Riding to the Top May 2014-Present
Windham, Maine

- Facilitate a safe and effective environment for riders, volunteers, and horses
- Teach children and adults to ride, care for, and understand horses
- Plan activities relating to both horsemanship and developmental skills

Nanny Summer 2014 - Present
Portland, Maine

- Create a safe and fun environment for young adolescent who has Down Syndrome
- Encourage questioning, exploration, collaboration, and life skills

- Travel with family on vacations to ensure safety and provide extra support

Ski Instructor, Shawnee Peak Race Team

December 2013-2016

Bridgton, Maine

- Promote safe skiing practices and a supportive team atmosphere
- Provide feedback for athletes and plan appropriate drills and exercises

Math Tutor, UMF Learning Commons

January 2015-December 2015

Farmington, Maine

- Tutored peers in pre-calculus, statistics, calculus, and economics
- Coordinated with and observed peers to ensure best practices while tutoring

Practicum Teacher, Mt. Blue Middle School

January 2015-May 2015

Farmington, Maine,

- Assisted with everyday classroom activities
- Taught lessons and directed classroom activity
- Observed parent-teacher, student-teacher, and team meetings

Professional Development

- NCTM Member
- Path Intl. Member
- Presented on Poverty in Schools for practicum (2017)
- Attended Path Intl. Region 1 Conference (2017)
- Attended MooseTech Conference (2015)
- Presented on iPad apps for math at MooseTech Conference (2015)

Technology Skills

- Well versed in creating Weebly, Wix, and Google Sites
- Experience with iMovie, filming and editing videos
- Extensive knowledge of Tinkerplots, Geogebra, Desmos, and Google Sketch Up
- Creative use of Google Drive, docs, slides, and sheets
- Intermediate knowledge of Python Programming Language

Content Strengths

- Chemistry and Environmental Science
- Economics and Political Science
- Beginning to Intermediate French and Spanish
- The outdoors, animal care, gardening, and land management

References

Deb Baker, Student Teaching Supervisor

deborah.baker@maine.edu

Bobby Smith, Student Teaching Mentor

bobby.smith@educator.edu

Grace Ward, Advisor

gward@maine.edu

Marissa LaGassey

Philosophy of Education

At the core of my educational philosophy is my belief that students should discover, create, and direct their own learning. As a pragmatist and constructivist, I believe that students should ask and answer questions, explore the natural world, and follow avenues for learning that truly interest them. Student-centered and project based learning can and should be rigorous while also interesting and personally relevant to each student. By allowing learning experiences that are meaningful to all students we can help to cultivate a generation of life-long learners. As we transition into a society dominated by innovation and creativity it is important that our students know how to think like there is no box and be creative problem solvers in every context. I believe that through differentiation and project based learning we can engage every student and enable them to achieve at high levels regardless of the everchanging job market and global economy.

To manage a classroom that encourages students to go in any direction they wish there must be accountability, resourcefulness, and organization on the part of the teacher and the students. Students need to feel that they are an integral part of a caring community and that their individuality is celebrated. When students feel accountable for their learning community they are more invested in their own success, the success of others, and the success of the community. Teachers who foster this type of learning environment model reliability, work ethic, and a growth mindset. Because all students do not come to school knowing how to be accountable and responsible it is important that we teach these skills and foster positive, productive attitudes in the classroom. By involving students, parents, and the community in creating policies, atmosphere, and procedures, the classroom becomes a meaningful place where everyone feels ownership.

As a math teacher, I know that I will encounter many students who have math anxiety or fixed mathematical mindsets. Technology, real-world context, and creativity are the best tools to cure these feelings of insecurity. Replacing high-risk testing situations with question driven projects allows all students to show their knowledge and explain their thinking in ways that meet their individual needs. To differentiate instruction effectively, we need to differentiate assessment as well. While tests measure past learning, and have a clear ending, projects promote new learning that extends well beyond the classroom. Technology allows students to make their complex ideas happen and present their work in a professional way that can be widely shared. As teachers, it is our job to spark inquisitiveness and creativity in our students, give them excellent tools, and watch them soar.